

# Animal Keepers' Forum

January 1990



*Dedicated to Professional Animal Care*



# *Ngare Sergoi Rhino Sanctuary Annual Report from Anna Merz*

Nineteen-eighty-nine has been a good year for our rhinos thanks both to the "extension" and to reasonable rains, 14 inches at time of this writing in mid-November. All have remained in good condition as have the other animals. The great excitement of the year has been the birth of our first white rhino calf, a male called N'Juku, to Marembo on 1 October. Though it is her first calf she is a most excellent mother and he seems to be flourishing. Samia is now nearly five and about 2/3 grown. She is quite independent and meets up with the other rhinos, but is still my friend and comes to the house regularly and many evenings joins me and the dogs on our daily walks. Always she is gentle and affectionate with me and my appreciation of her intelligence grows with my slowly increasing understanding.

Thanks to Francis and Ian and our dedicated staff, the Shifta have not attempted to come here yet but the murder of George Adamson brought home very clearly the threat to our rhinos. George's death also came to me as a great shock and personal loss. I had four very wonderful days at Kora with him last year just before Christmas and did not see him again. His letters were a great source of both inspiration and encouragement to me.

To all of you who have helped me and particularly Andy Lodge and the members of the Ngare Sergoi Support Group, I must say, on behalf of the rhinos and all of us here, a very big thank-you. Andy has now left the Columbus Zoo in Ohio and is working full-time for the Support Group and to raise public awareness on behalf of the rhinos and elephants of Kenya and all Africa. Andy, thank you. Thanks to all of you we are not only able to run this place, but to run it even better than before. Our security is updated and more efficient, we have more men in the field and they are better trained and equipped and are full of enthusiasm. Our re-housing project is well underway, partly funded by the Extension Acct. and partly by WWF in Switzerland which has also given us a new Toyota Landcruiser. My personal thanks go to Dr. Eva Metzger of Switzerland whose great generosity has enabled me to replace my poor battered old Suzuki with a bigger and more comfortable model so that now those of you who come and visit me can be driven around in much greater comfort.

It has been lovely meeting old friends again here and also meeting so many of my supporters for the first time. I appreciate it greatly when people brave the hazards of my cooking to spend a couple of days here so that we can really get to know each other and be able to take a bit of time looking at the rhinos. I have been very busy this year trying to write a book about the rhinos and my life here both to try and raise public awareness as to what intelligent and fascinating animals they are and to try and raise a bit of money for them. I have now reached the stage of searching for a publisher.

*Anna Merz*





# MEMO:

TO: All AAZK Members/Chapters

FROM: Bill Whittaker, Director of Regional and Chapter Affairs and  
Nancy Pintavalli, Co-Director CRAC

RE: National Zoo Keeper Survey and Bowling for Rhinos Update

The National Animal Keeper Survey has been initiated to compile information which will give us a much more accurate picture of the current state of our profession. It will also enable us to insure that the future course of our organization accurately reflects the needs and goals of the majority of professional keepers.

This is a very important project and the first challenge for the Regional Coordinator System. Success will depend on all of us; coordinators, liaisons and keepers. We want to survey every keeper we can reach. The USDA list of licensed animal exhibitors is the most complete list of potential keeper employees. We have prioritized the list by type of facility:

Type 1 --	Zoos and Aquariums
Type 2 --	Parks, Ranches, Farms
Type 3 --	Private Collections, Performers

We are targeting Types 1 and 2 totaling about 550 facilities. We separated the list by regions and established a target load per coordinator of 10-15 facilities.

All coordinators have received a list of the target facilities assigned to them and should have recruited a liaison at each one by 1 January. The coordinators will be supplied with the survey to be distributed to their liaisons. The questionnaire is divided into two parts; census and survey. The liaison will personally contact every keeper at their facility. They will ask the keeper if he/she will participate by filling out the form. If the reply is no, the liaison will fill out the census section with information known. If the response is yes, the liaison will give the keeper the form and request that it be completed and returned by a specific date. In the event a keeper fails to return the form by the deadline, the liaison will fill out a census page.

The liaison will collect all completed forms, including a census form for each keeper employed at the facility, and return them to the coordinator. When the coordinator has received completed forms from all the facilities assigned to him/her, they will send them to me.

Finally, a reminder that the 1989 Annual Financial Statement is due by 31 January, 1990.

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As February fast approaches, many Chapters have elaborate plans underway for the 1st Annual Bowling for Rhinos. We are currently taking orders for the sponsor sheets. This is a two-part carbonless form available free of charge and which **MUST BE USED FOR THIS EVENT**. I must know as soon as possible if your institution (you don't have to be a Chapter to participate) is hosting a bowl-a-thon. Some items for sale nationally include: Logo T-shirts by Bruce Wojcik of the John Ball Zoo (MI) (616) 776-2591; hand-painted Ngare Sergoi rhino pins by Adrian and Val Haft of the Louisville, KY AAZK Chapter (502) 459-2181; and the official Bowling for Rhinos Logo patch by Suzanne Husband of Toledo AAZK Chapter (419) 385-5721.

Please remember when planning your event to set sufficient guidelines for bowling activities or any raffles that you might hold. If you have any problems or questions please do not hesitate to call. Once again, official sponsor forms are available at no charge by writing or calling:

Nancy Pintavalli  
5903 Avery Rd. #B  
Amlin, OH 43002

(614) 766-6475 (home)

(614) 645-3400 (work)

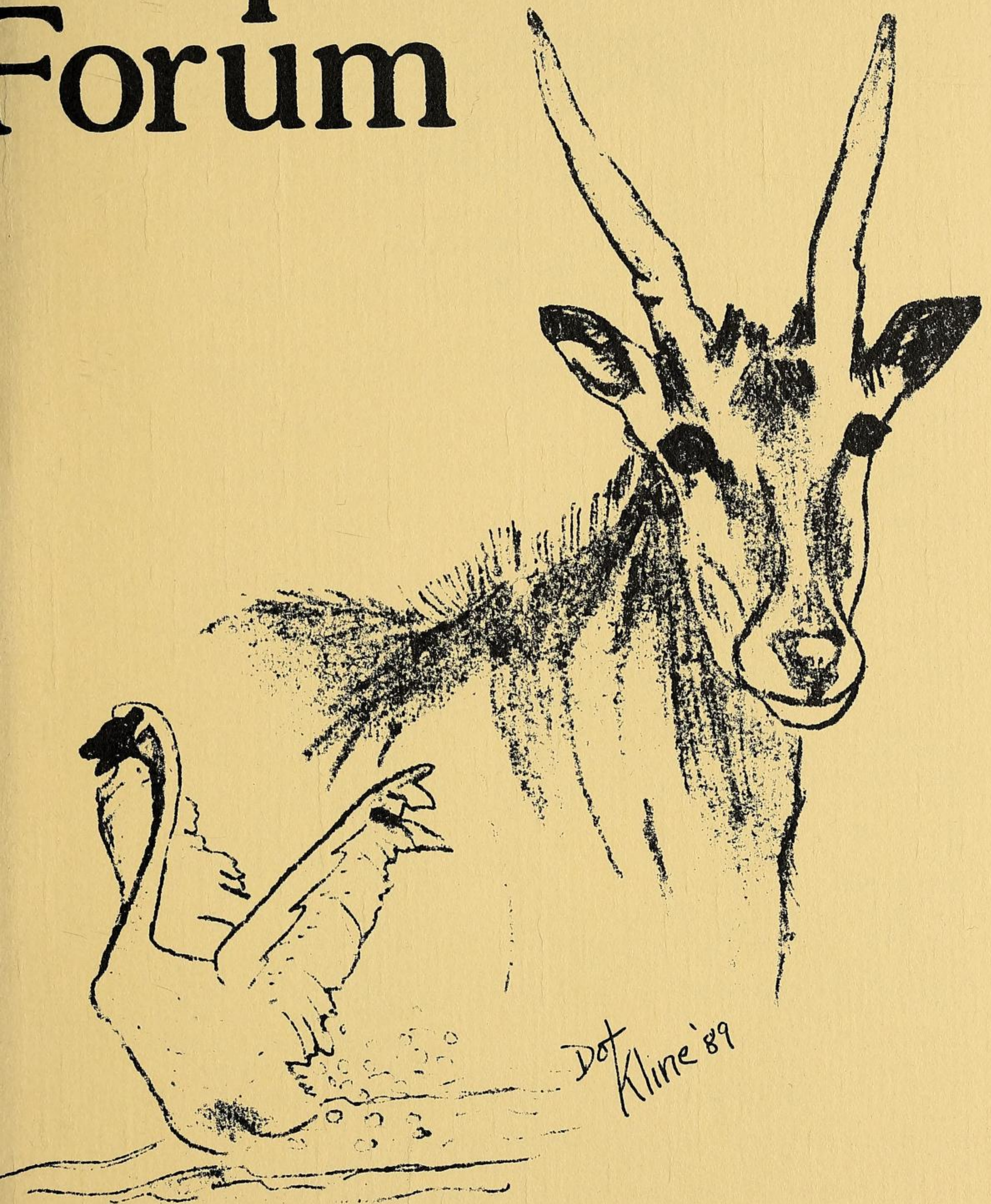
If you have difficulty reaching me by phone you can send your request for Sponsor Sheets by FAX. My FAX number is 614-645-3465--include your name, address, quantity of sponsor sheets desired and date of your event.





# Animal Keepers' Forum

February 1990



***Dedicated to Professional Animal Care***



# Conservation 2000

By  
*Philip Wooton*  
*Zimbabwe, Africa*

Conservation 2000 is a club founded recently by two Zimbabwean girls, Charlie Hewat and Julie Edwards, in their aim to make people more aware of the serious threat to wildlife and its environment made by man not just in their native Zimbabwe but worldwide.

In 1987 the two girls underwent a mammoth sponsored cycle ride from the United Kingdom to Zimbabwe, a distance of some 22,000 kms (approx. 10,000 miles) to raise money for the Zimbabwe National Conservation Trust. The money raised was used to buy badly needed vehicles for use by the anti-poaching patrols in the National Parks. On the ride, which took them through sixteen countries, the girls gave a series of lectures/slide shows about the ride, the work of the National Parks and highlighted the serious threat to the Black Rhino from poaching.

In April/May 1990, the girls are planning to undergo another cycle ride for the rhino; this time across the United States of America. Although the itinerary is subject to change, the route will take in Philadelphia (PA), Washington, DC, Virginia, North Carolina, South Carolina, Atlanta (GA), Birmingham (AL), Memphis (TN), Dallas, Fort Worth and El Paso (TX), Phoenix (AZ), and into California via Palm Springs. People with whom the girls are currently scheduled to meet include President George Bush and film stars Jimmy Stewart and Stephanie Powers, both of whom are heavily into conservation; and the girls are also going to be making an appearance on the Johnny Carson Show.

Mr. Harry Tennison of the Game Coin Organization (Ft. Worth, TX) made the invitation to Charlie and Julie to travel to the U.S. and will be organizing the U.S. side of the trip; but Conservation 2000 would be interested to hear from any zoos or wildlife institutions which are situated along their planned route (or near to it) that would be interested in having the girls present a slide lecture show about the ride, National Parks in Zimbabwe and their future plans for Conservation 2000.

Conservation 2000 has just recently started their own monthly newspaper called "Conservation Now". The entire paper is devoted to animal and environmental issues from around the world. If you have an animal story, unusual animal photograph or animal jokes that you would be willing to share with us Conservation 2000 would like to hear from you with a view to possibly using them in future issues of the "Conservation Now" newspaper. Contributors on a regular basis (if used in the paper) will get a year's free membership to Conservation 2000 and receive 12 monthly issues of the newspaper.

Memberships in Conservation 2000 are available at the following rates: U.S. £35.00 airmail or £10.00 surface mail; Europe £30.00 airmail or £10.00 surface mail. International money orders should be sent in sterling to: "Conservation Connections", Midland Bank, St. Peter Port, Guernsey, Channel Islands, UK.

If you wish to contribute to the newspaper, have the girls give a slide show on their U.S. trip or wish to know more about Conservation 2000, please contact me: Philip Wooton, Conservation 2000, c/o Munn Publishing P/L, P.O. Box UA 460, Union Avenue, Harare, Zimbabwe.





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# Animal Keepers' Forum

March 1990



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## Births and Hatchings, *Continued*

Once again the Los Angeles Zoo is fortunate to be able to care for a newly captured female Sumatran rhinoceros for the winter before it goes to its new home at the New York Zoological Park. "Augustina" was captured in August 1989 and her age is estimated to be 3-5 years. These rhinos, found in the rain forests of Southeast Asia, are endangered and number approximately 700 in the wild. There are only five species of rhino left and only one of these, the White Rhino is not considered endangered. The Sumatran is the smallest of the rhinos and has two skin folds, one across the shoulders and the other across the hindquarters. Their bodies are covered sparsely with hair. *submitted by Linda Cory, Chapter Liaison, Los Angeles Zoo AAZK Chapter, Los Angeles, CA.*

Metro Boston Zoos...on 8 December, 1989 the 0.1 Dwarf Forest Buffalo 'Red Sonya' (*Syncerus caffer nanus*) gave birth to a male calf. This marks both the first time this species has bred at MetroParks Zoo and the first successful birth at the African Tropical Forest exhibit. The calf, named 'Lenie', stood and nursed shortly after birth and was observed eating hay and grain only four days after he was born. *from Keeper News, newsletter of the Metro Boston Chapter AAZK, January 1990.*

North Carolina Chapter AAZK...reports notable births and hatchings from 1 October - 31 December 1989 from each participating institution:

Duke Primate Center...notable births at the Duke University Primate Center include that of another Sifaka (*Propithecus verreauxi*) on 28 December to one of our females, Cornelia. This is her fourth offspring since her arrival in May 1982. This increases our total population of this very rare and beautiful species to 18 with 6.8.1 Sifaka and 1.2 Golden crowned sifaka (*Propithecus tattersalli*). *submitted by Ruby Ange, Research Tech, DUPC, Durham, NC.*

North Carolina Zoological Park...notable births include a male Gerenuk (*Litocranius walleri*) in October and a male Kirk's dik-dik (*Madoqua kirki*) in December. Both animals are doing well and being raised by their parents. *submitted by Cynthia Noe-Hanson, Secretary/Chapter Liaison, N.C. Chapter AAZK.*

The Jackson Zoological Park...in Jackson, MS would like to announce the following significant births, acquisitions and deaths from September-December 1989: Births included 1.1 Chimpanzee (*Pan troglodytes*), 0.1 Lion-tailed macaque (*Macaca silenus*), 0.1 Black spider monkey (*Ateles paniscus*), 0.2 Colobus monkey (*Colobus guereza*), 0.1 Dama gazelle (*Gazella dama*), 1.1 Sable antelope (*Hippotragus niger*), 1.0 Reticulated giraffe (*Giraffa camelopardalis reticulata*), and 0.0.1 Cotton-top tamarin (*Saguinus oedipus*). Acquisitions of note include: 1.1 Clouded leopard (*Neofelis nebulosa*), 1.1 Cheetahs (*Acinonyx jubatus*), 1.1 Sloth bear (*Melursus ursinus*), 0.1 Springbok (*Antidorcus marsupialis*), 0.1 California sea lion (*Zalophus californianus*), and 1.0 Grand eclectus parrot (*Eclectus roratus*). Deaths were: 1.0 Jaguar (*Panthera onca*), 1.0 Common hippo (*Hippopotamus amphibius*), and 1.0 Grand electus parrot (*Ecelctus roratus*). *submitted by Pat Steele, Chapter Liaison, Jackson, Mississippi Chapter AAZK.*

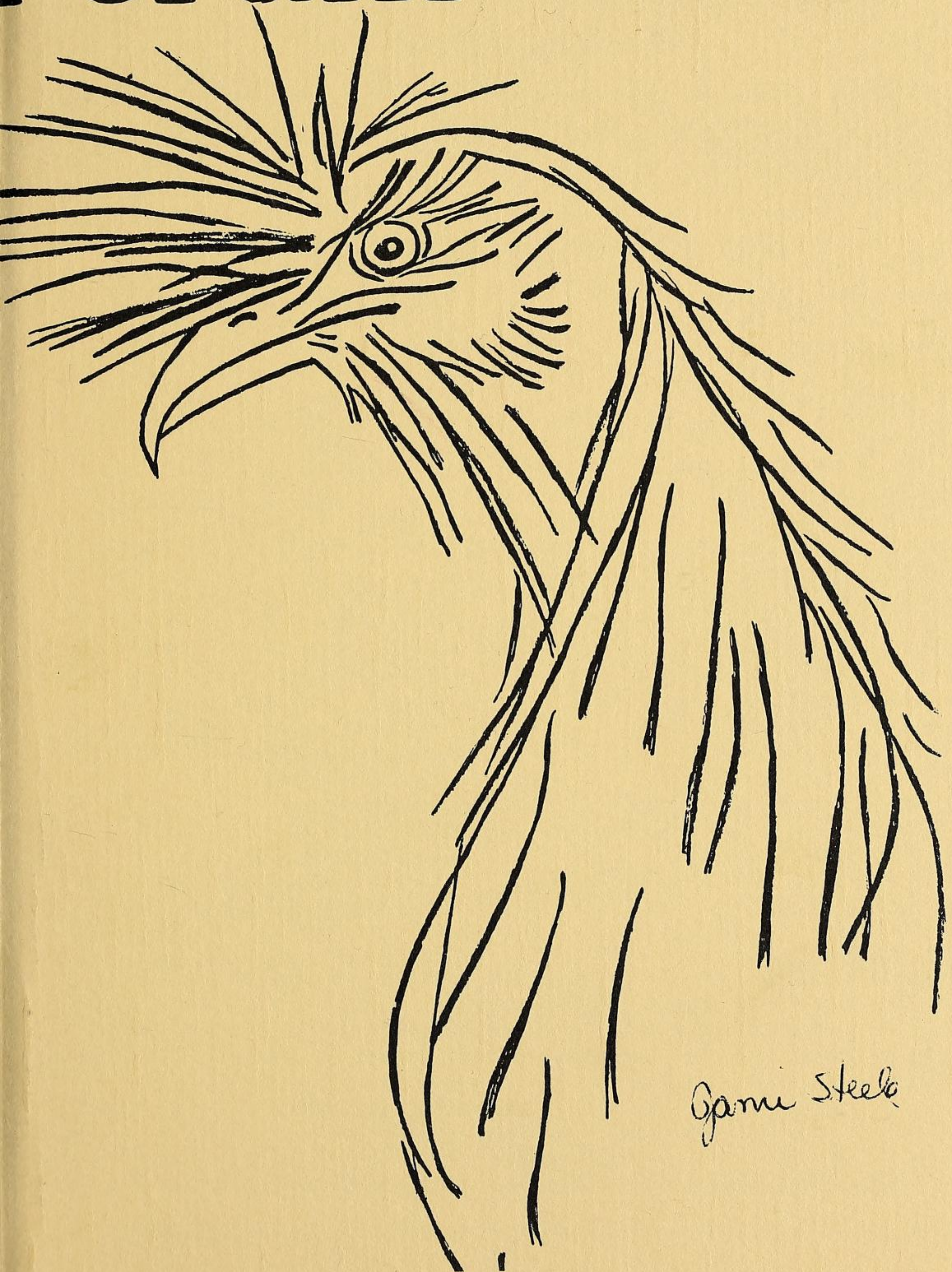
Houston Zoo Chapter AAZK...reports these significant births and hatchings from the many of 1989.

Our Bird Department has success with many rare and rarely bred species. These are a few examples: 0.0.3 Helmeted Curassow (*Rax pauxi*); 0.0.1 Hyacinthine macaw (*Anodorhyncus*), this is the second year in a row that this pair has produced and raised a chick; 0.0.3 Green hunting cissa (*Cissa chinensis*), this is our second successful hatching of this seldom bred species; 0.0.1 Nocturnal curassow (*Nothocrax urumutum*); 0.0.3 Golden headed quetzal (*Pharomacrus auriceps*), we have hatched 16 of these remarkable birds since 1986, 14 of which have survived past 30 days; 0.0.3 Silver-eared mesia (*Leiothrix*



# Animal Keepers' Forum

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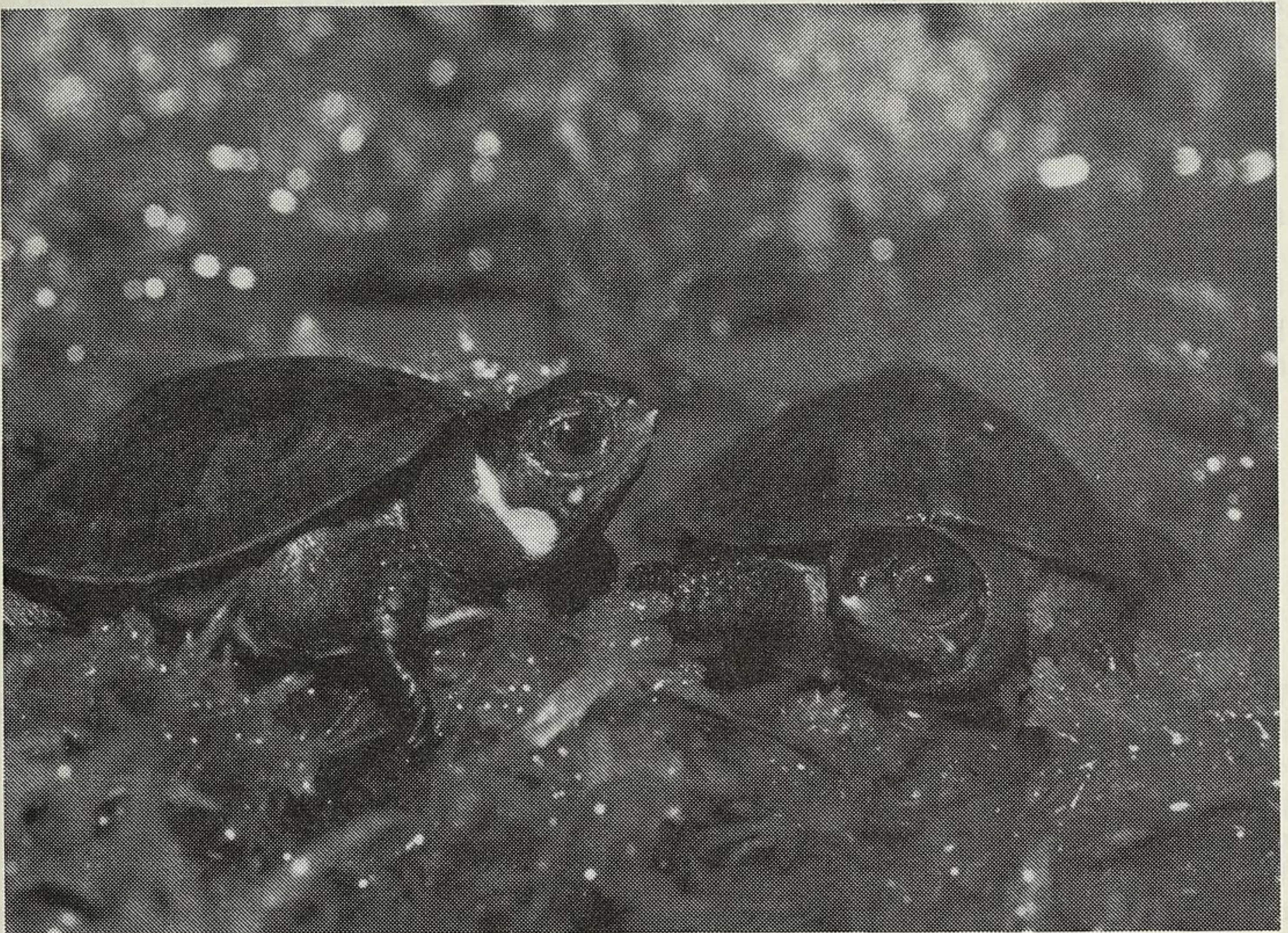
*Gami Steele*

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## **Births & Hatchings. Continued**

program involves field surveys and radio telemetry studies which will hopefully lead to head-starting and re-introduction of the bog turtle into its historic range in Western New York.



**Two Bog turtles (*Clemmys muhlenberg*) were hatched at the Burnet Park Zoo in Syracuse, NY during February. Burnet Park is involved in a Bog Turtle Conservation Program for this endemic endangered reptile.**

The February hatching resulted from an on-going experiment designed to evaluate the feasibility of increasing the reproductive out-put of captive bog turtles. Turtles were shifted from a naturalistic outdoor enclosure to a heated indoor enclosure following a six-week fall brumation period. The shift resulted in courtship, breeding and nesting from two of three females. The group will be returned to the outdoor enclosure in early spring to re-enter a state of brumation and hopefully emerge and breed with the onset of warm weather. The potential of doubling the reproductive out-put may be a very important management tool in the conservation of this and other species with naturally low fecundity.

For more information on Burnet Park Zoo's Bog Turtle Conservation Program, please contact Dave Collins, Senior Keeper, Reptiles and Birds, Burnet Park Zoo, Syracuse, NY.

**Omaha's Henry Doorly Zoo...**beginning 1 January 1990 we are reporting births, hatchings and acquisitions in the following areas:

Cats/Bears: born on 18 Feb. were twin Ring-tailed lemurs (*Lemur catta*), bringing the group total to 7.6.2. Also born on 8 March were 0.0.3 Bengal tigers (*Panthera tigris tigris*). Two were orange phase and one was white. This brings our total population of white tigers to 5 in a complex which currently houses 50 cats total.



## Births & Hatchings, Continued

Our Hoofstock crew received 0.1 Bactrian camel (*Camelus bactrianus*) from the Detroit Zoo. Births include 1.2 Nile lechwe (*Onototragus megaceros*). These animals are in the SSP program. Currently we have 10.11.0. On 8 March a female Reticulated giraffe (*Giraffa camelopardalis reticulata*) was born, raising the herd total to 2.6.0.

Small Mammals: on 9 March 0.0.1 Indian fruit bats (*Pteropus gigantacus*) was born. This is the first birth of this species at our zoo in three years.

Primates/Pachyderm crew received 1.0 White rhino (*Ceratotherium simum*) on SSP breeding loan from the San Diego Wild Animal Park.

Our Bird department has had 0.0.3 hatchings of Emu (*Dromiceius novae-hollandiae*) since January. Also hatched were 0.0.2 Cape Barren goose (*Cereopsis novae-hollandiae*), 0.0.1 Crested tinamou (*Eudromia elegans*), and 0.0.2 NeNe chicks (*Branta sandvicensis*) which hatched on 3 March. submitted by Diane Callaway, Chapter Liaison, Omaha AAZK Chapter, Omaha, NE.



## Information Please

WILDFUR has recently received its first case of the protozoan infection *Besnoitia darlingi* in a adult male Virginia opossum. My veterinarian (Dr. Jane Nall, DVM) and I wondered whether anyone might be willing to share any information on cases of this type. What percentage of opossums, if any, have you received with this infection? With what medication and dosage have you treated them? What survival rate have you experienced? We would be grateful for any and all information that you might be able to offer. We are currently treating this opossum with Albon (sulfadimethoxine) at 120mg/100ml of drinking water. Please send information to: Dorothy C. Ahler, WILDFUR, 718 Chambers Dr., Huntsville, AL 35801.

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Keepers and other interested staff have begun to meet here at Metro Toronto Zoo to promote and facilitate our continuing quest for environmental and behavioral enrichment for the animals in our collection. Our group would be most pleased to hear what the rest of you are doing along these lines. Please write with information on strategies, devices or techniques to: Charles Gutherie, Metro Toronto Zoo, Box 280, Westhill, Ontario, Canada M1E 4R5.

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The Pittsburgh Zoo is looking for information on heights and weights of Reticulated Giraffes at birth. They have recently experienced the birth of a male who weighed 185 lbs at birth and was 72 inches tall. Others who have experienced births of larger than usual giraffe babies are asked to send any pertinent information to: Ray Bamrick/Diane Hagey, Elephant/Giraffe Dept., Pittsburgh Zoo, P.O. Box 5250, Pittsburgh, PS 15206.

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I am looking for information on color ratios of Amazon tree boa (*Corallus e. enydris* or *cooki*) litters, along with color descriptions of both parents. The information is to be used in a study of color inheritance in this highly variable species. You may send descriptions, color photos, or just a postcard and I will return a data sheet and color pattern key. Please send to: Al Winstel, 2651 Cornwall Dr., Cincinnati, OH 45231.





## Chapter News, Continued

Our conservation activities were focused on bats. We constructed and installed bat boxes in the zoo last spring. Bat Conservation International offers a very nice slide show about bats and their conservation. We purchased it and showed it at our AAZK booth during the Little Rock Zoo's Spooktacular event near Halloween. Plans for bat boxes were also available at the booth.

Our Zoo's biggest event is Zoo Days which takes place in August. The AAZK booth featured a display of diets that zoo animals eat. This was well received by the public.

Our Education Committee has been presenting a program on zoo keeping to school children. When requested, a keeper will visit the school, present a slide show, and answer questions. This program has been well received and requests for it are increasing. We're working on updating the slide show.

This year should be an equally productive one. We're already planning to participate in the Zoo's Earth Day celebration this month.

--Ann Rademacher,  
Chapter Liaison

## Zoo Atlanta AAZK Chapter

Our Chapter has been preparing for "Bowling for Rhinos" which was held on 7 April. We delayed the bowlathon so we could also tie in the opening of the Zoo's new Black Rhino Exhibit.

Recently a travel fund for travel in conservation and education was made available to members of Zoo Atlanta's Keeper staff. The Gaston Travel Fund is being donated to the Zoo by John and Jane Gaston. The funds would be available once a year for a zookeeper to travel overseas for purposes of self-education, research and conservation.

Our Chapter made a donation to Mark and Delia Owens who recently visited Atlanta. The Owens study lions in East Africa. Another donation was made to The Nature Conservancy to purchase an acre of rainforest.

--Lisa P. Hughes,  
Chapter Liaison



## Information Please

Ross Park Zoo and representatives from the New York State College of Veterinary Medicine at Cornell University are collaborating in a research project to measure reproductive hormones in exotic carnivores. The Zoo's Siberian Lynx pair is part of this project. Additionally, Ross Park is attempting to inventory and enumerate the species and would appreciate hearing from institutions/individuals having this species in their collections who have not been contacted. Information can be sent to: Dr. Daniel Nielsen, DVM, c/o Ross Park Zoo, 185 Park Avenue, Binghamton, NY 13903.

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Anyone having information on the successful breeding of Hyacinthine Macaws (*Anodorhynchus hyacinthinus*) or on general husbandry of these birds is asked to send it to: Karyn Tunwell, c/o Metro Toronto Zoo, P.O. Box 280, West Hill, Ontario M1E 4R5, Canada.

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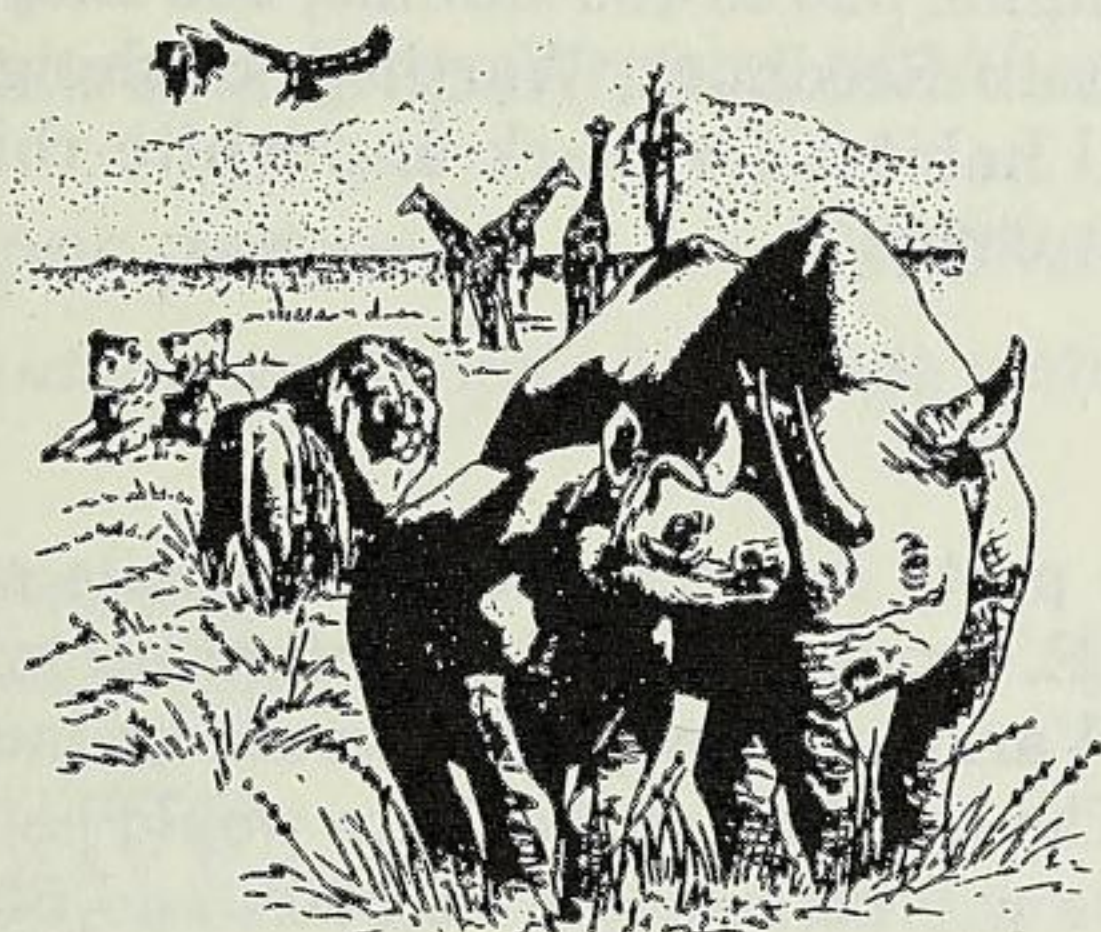
We are interested in obtaining information concerning the head-starting of freshwater turtles (specifically *Pseudemys*) in reference to sustained water temp., photoperiod, duration of head-starting, and diet. Any information or data on this topic would be very helpful. Please sent to: Zoo Dept., New England Science Center, 222 Harrington Way, Worcester, MA 01604.



# ***Ngare Sergoi Support Group, Inc.***

## ***Update to the AAZK Membership***

As members know, Ngare Sergoi Rhino Sanctuary, located in Isiolo, Kenya and under the direction of Ian Craig and Anna Merz, is a safe sanctuary for 14 black and 5 white rhino. Since the reserve's founding in 1984, six black rhino calves have been born. But the reserve also holds many other species of wildlife including giraffe, kudu, eland, zebra, etc. Because of the success of this well managed reserve, the Craig family along with Anna Merz, have received permission from the Kenyan government to establish the Ngare Ndare Forest Reserve. The reserve is set up to protect not only the endangered African elephant and black rhino but also the flora and fauna of this unspoiled area of northern Kenya. We are hoping to work out an arrangement whereby AAZK would help to support this reserve financially with the distinct possibility of establishing an AAZK conservation research station. Following is a copy of the Forest Reserve proposal submitted for the national conference in New Orleans with the hope that Ian Craig of the Ngare Sergoi rhino project will be in attendance. We will have much more information on the reserve by November and hope to discuss it during the week with the membership.



Sincerely,

Andy Lodge

### **Ngare Ndare Forest Reserve**

#### **Introduction:**

The Ngare Ndare Forest Reserve is an area of approximately 52 square Kms of dry country cedar forest. It is situated on the north side of Mt. Kenya and receives an annual rainfall of 400 to 500 mm. The present status is Forest Reserve. There is however considerable pressure from the surrounding population for timber, firewood and grazing. The resulting over-utilization has resulted in an accelerated degradation and erosion of the forest. It is anticipated if the present trend continues, little of the remaining primary forest will remain after ten years. The protection of this forest watershed is vital for the settlements and agriculture in the adjoining areas. The wildlife within the forest is subject to considerable pressure from meat poaching and the elephant continually raid the surrounding agricultural land.

#### **Proposal:**

It is proposed that the status of the area be changed to a National Reserve in order to fully protect the fauna and flora of a unique forest. Simultaneously this would protect the springs which are vital for the water supply to Isiolo and a large area to the north of the forest. The forest should be electro-fenced to remove the clash between agriculture and wildlife. It should then be managed for the benefit of the local populace, for the conservation of the wildlife in its habitat and for the benefit of Kenya as a whole.



## Ngare Sergoi Support Group Update, Continued

### **Method:**

A solar electro-fence would be erected along the forest boundary in all areas where there is conflict between agriculture and wildlife. Three maintenance bases would be required to accommodate two men each, a small administrative base would be required for a warden and eight men to patrol the area. The warden would need a Suzuki or similar vehicle to carry out his duties. Individuals and organizations could then be invited to consider the area for tourist development in the form of a small up market camp paying appropriate cess to the local county council. The aim would be to operate the project as a self sustaining economic unit and at the same time to achieve important long term conservation goals. For this project to work it will need the full support of the local populace adjoining the area. They should get preferential employment whenever possible. In view of the shortage of firewood in the area, limited firewood collection should be allowed under the supervision of the warden and the controlling body. Well managed timber extraction could be considered as well as honey production from hives in the forest.

### **Wildlife:**

The present ecosystem supports the following wildlife: 300 to 400 Buffalo, 200 Elephant, 100 to 300 Eland, 300 Waterbuck, Bushbuck, Mountain Reedbuck, Warthog, Bushpig, Colobus Monkey, Lion and Leopard. It is also an ideal habitat for black and white rhino which could easily be re-introduced from nearby sanctuaries.

### **Fence:**

The fence would be built using treated wattle posts and 2.6mm high tensile steel wire. Power would be supplied by solar powered S.B.E. energizers. The configuration would be such that it would keep all the wildlife inside. Various entry points would be incorporated into the fence for the entry of the local people. The building of the fence would be put out to tender. It is estimated that the cost of the fence will be between 45,000/- and 53,000/- per running Km. The total length that will require fencing is 38.5 Kms.

### **Finance:**

Pending the approval of all parties concerned, an approach would be made to various international funding agencies together with some individuals for the total sum required. The operating costs would also be applied for, for a period of five years, after which it would plan to be self sustaining with revenue generated from tourism.

### **Conclusion:**

With increasing pressure on similar ecosystems this project could be a model whereby a whole ecosystem would be protected without burdening the country with the cost of this protection. At the same time, contributing to the expansion of Kenya's tourist industry, protection of high potential agricultural land from wildlife and employment opportunities.





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May 1990



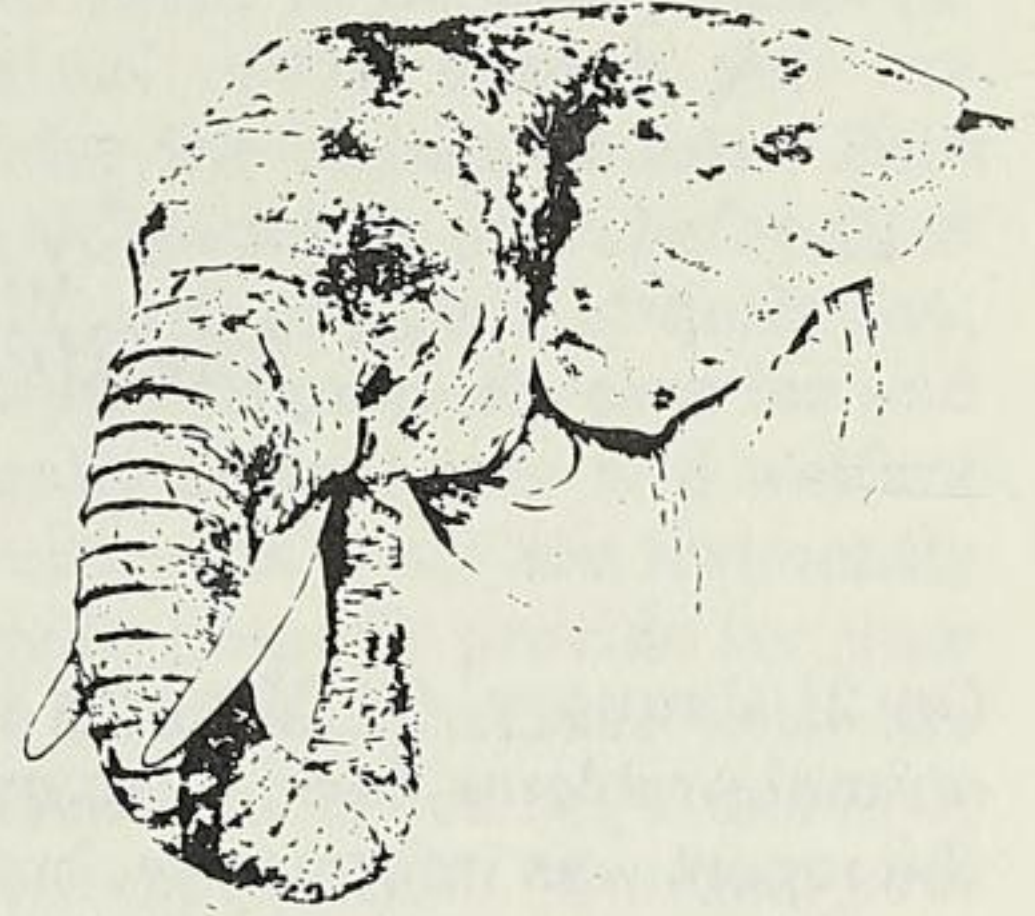
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# Nutrition News:

## Progress With Pachyderms

*By Ellen Dierenfeld, Ph.D.  
Nutrition Advisor, Elephant Research Council  
and Rhino Research Group  
New York Zoological Society, Bronx, NY*



A number of collaborative research projects examining vitamin E nutrition in elephants and rhinoceros have been conducted during the past year.

Circulating blood levels of  $\alpha$ -tocopherol, used as a measure of nutrient status, increased in both African and Asian elephants ( $n=7$ ) from 2 zoos following oral supplementation of diets with d, 1  $\alpha$ -tocopheryl acetate for at least 1 year. For both groups, however, blood levels were still below the means measured in either captive North American (0.5 ug/ml;  $n=20$ ) or free-ranging African (0.8 ug/ml;  $n=10$ ) populations. Feeding trials conducted at the Denver Zoo (elephants) and Metro Miami Zoo (black rhino) in collaboration with Eastman Chemical, Inc., examined plasma responses of animals to different forms of dietary supplements (natural vs. synthetic isomers vs. a water miscible preparation of  $\alpha$ -tocopherol). Preliminary results, presented at the recent Dr. Scholl Conference on the Nutrition of Captive Wild Animals, showed no response differences between acetate vs. alcohol preparations of  $\alpha$ -tocopherol in pachyderms, as well as no difference in response to natural vs. synthetic forms. These results support conclusions of a similar study conducted over a longer time period (6 months) using 5 elephants at the New York Zoological Park which were reported at the Asian elephant SSP meeting in September.

Oral administration of the water miscible preparation, tocopheryl polyethylene glycol 1000 succinate (TPGS), rapidly increased circulating blood values of  $\alpha$ -tocopherol. Long term effects of polyethylene glycol, cleaved from TPGS, on animal metabolism are not known, but early results suggest this formulation may be useful in initially raising plasma levels.

The effect of injectable vitamin E on plasma levels has been evaluated in a black rhinoceros (see *J. Wildl. Dis.* 25:647-648) in cooperation with Dr. S. Citino at the Miami MetroZoo. A similar study was repeated with an elephant by Dr. E. Miller at St. Louis (unpublished data). In both species, a single injection providing 5-10 IU vitamin E per kg body mass elevated plasma levels rapidly; significant increases remained even 17 days following injection.

Plasma lipoprotein fractions in rhinoceros (black, white, and Indian) are being evaluated by researchers at New York University to better understand metabolism of this fat-soluble vitamin, and tissue (skeletal, muscle, adipose, liver, heart) levels of  $\alpha$ -tocopherol are being measured from specimens obtained by numerous personnel in U.S. zoos during necropsies, through the cooperative efforts of the Rhino Research Group headed by Dr. R. Godfrey.

Finally,  $\alpha$ -,  $\delta$ -, and T-tocopherols were quantified in >70 plant species collected from Zimbabwe and Kenya during a field study in September; results are currently being summarized. The project involved researchers from the New York Zoological Society, Wildlife Conservation International, the Zambezi Rhino Project, and World Wildlife Fund. Information on vitamin E levels in diets of free-ranging elephants and rhinos, as well as physiological and clinical studies in zoo animals, should assist in evaluating and improving captive feeding programs for these critically endangered species.

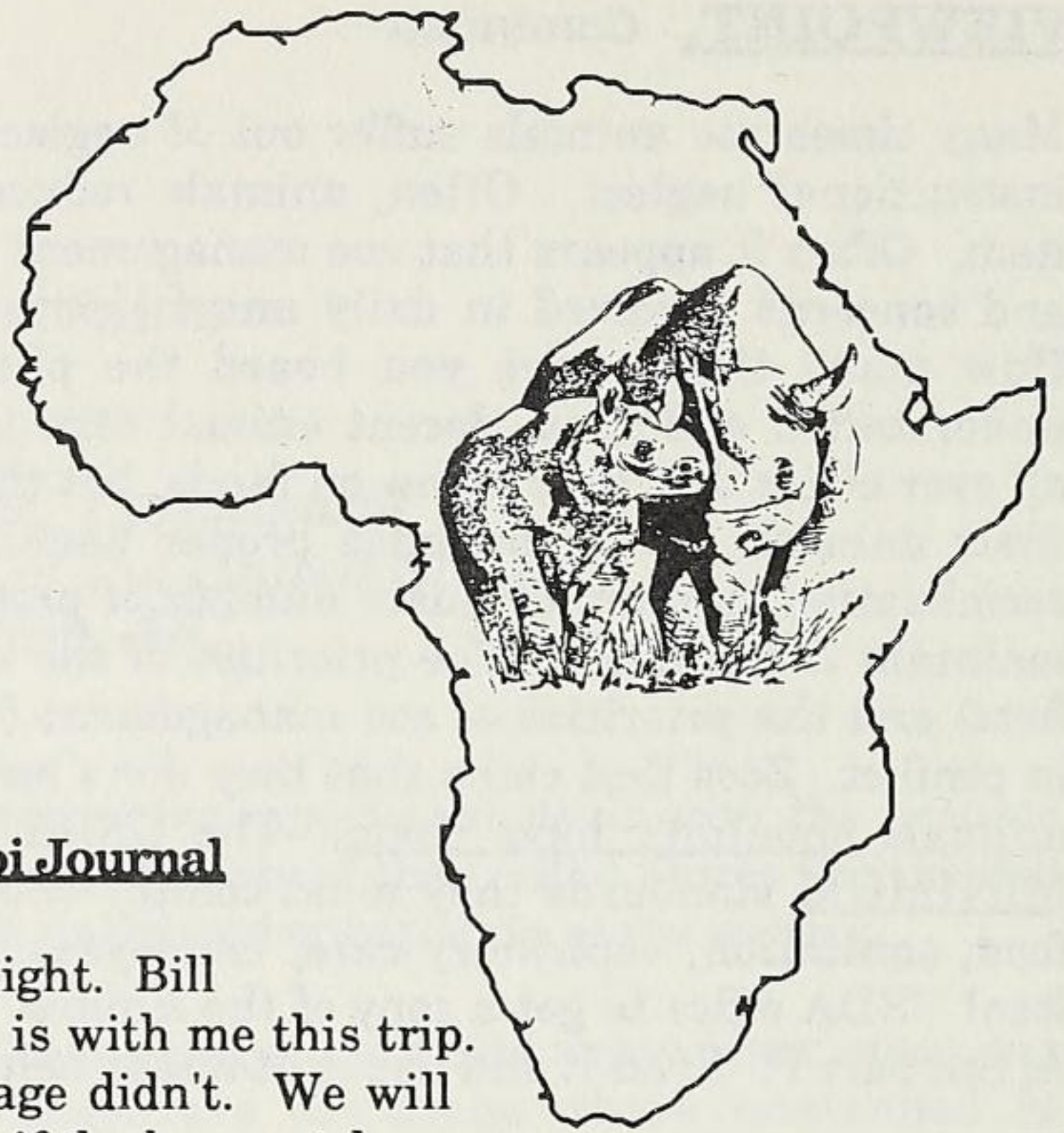




# *Kenya Diary*

## *1990*

*By*  
*Andy Lodge*  
*Ngare Sergoi Support Group, Inc.*  
*Columbus, OH*



### On the Brink of Extinction: A Ngare Sergoi Journal

**Jan 8, 1990** - Arrived in Nairobi late last night. Bill Pittinger, a friend of mine from Columbus, is with me this trip. When we arrived we found out Bill's luggage didn't. We will have to spend an extra day in Nairobi to see if the bags catch up.

**Jan 9** - Had to leave this morning, the bags didn't show up. Hope they do soon. Arrived at the reserve at about two o'clock in the afternoon. Anna and Samia were waiting for us. Samia is no longer the little girl, but a three-quarter grown female rhino. The reserve is greener and prettier than I've ever seen it, lots of rain this year. Anna looks well, and seems to be doing fine. Spent the rest of the day getting settled in.

**Jan 10** - Went out this morning to look at the rhino. It was good to see my old friends again. They look happy and healthy. Got a look at the new white rhino calf. People from Audubon Magazine were here today. The magazine is doing a full issue on African wildlife and want to do an article on Anna. I drove the photographer around to take photos of Anna and Samia. I hope the article will bring more attention to the plight of the black rhino.

**Jan 11** - Did the rhino check this morning and went to visit William Craig to work out details for a touring company in New York. SafariWorld wants me to lead Kenya tours for them, with two days here at Lewa Downs, and a tour of the Ngare Sergoi Rhino Sanctuary and a chance to meet and talk to Anna. William, who is in charge of the tourist operation, was most cooperative and said we could surely work something out and make it an interesting and educational experience for the people who take these tours. This evening Anna and I went over the books and totaled up the donation for the year from the Ngare Sergoi Support Group. Thanks to the hard work and unselfish generosity of a lot of good people, particularly the American Association of Zoo Keepers, I'm happy and proud to report we have sent \$42,000 to protect and care for the rhinos of Ngare Sergoi. Everyone involved with this project sends their sincere thanks to the concerned and caring people of North America.

**Jan 12** - On the rhino check this morning we observed the young bull, Kelele, breeding with a cow named Stumpy. It was great to see Kelele breeding as he was young and always intimidated by Godot, the magnificent bull that was tragically slaughtered by Shifta in Meru Park after he was moved from here in 1988. I know an animal like Godot will never be replaced, but we all hope for the best in young Kelele. This evening, Bill, Anna, and I took dinner up on top of one of the mountains on Lewa Downs. We had a nice picnic with a beautiful view of the reserve in the full moonlight. On the way back we saw eyes shining in the distance. With the aid of our flashlights we watched two cheetahs on a night hunt. A good ending to a good day.

**Jan 13** - Today's Bill's birthday. As he likes horseback riding, Anna took him to a friends to go riding. As I don't do well with horses and never enjoyed riding, I stayed back to read and work on my diary and some other articles. For lunch we went to a place called Kentrout, it's a trout farm and it also serves one of the best lunches around. It also is one of the few places you can see colobus monkeys. We were lucky enough to see two of these beautiful primates today.



## Kenya Diary 1990, *Continued*

When we returned to the reserve Jane Craig called on the radio to tell us that the elephants had come on to Lewa Downs last night. Bill and I drove over in the Suzuki four-wheel Anna lets me use while I'm here. We counted around sixty-six, with many calves. The elephants here are not nervous and don't run when they see people like they do in most of Kenya. It seems they know they're safe inside the boundaries of Lewa Downs and needn't be in constant fear of sudden death.

**Jan 14** - Word came that a wild rhino has been seen near Womba. Anna, Bill, and I, along with three trackers are leaving in the morning to see if it's there; if it is, Ian Craig will have a capture team ready to go. As luck would have it I came down with dysentery today, if it doesn't clear up I'll stay back and rest and recover, as I want to be well enough to help on the capture. I would never go on a search or capture if I wasn't 100%. Getting a rhino to safety is far more important than to try to go and end up being a burden, which I feel would be selfish and stupid, so I'll rest tonight and hope I feel better tomorrow.

**Jan 15** - I'm feeling much better this morning. We left the reserve for a six-hour drive over some very rough roads to reach the area where the rhino has been seen. We arrived at a Samburu village in the area and met with the people who were to take us to the rhino. We drove back into the bush as far as we could in the four-wheel truck, parked, and Anna and the trackers went on foot, leaving Bill and I to watch the truck and equipment. They were gone about an hour and returned with the great news that they had found fresh rhino tracks. As we were too far away to contact the reserve by radio, we left immediately to get to the top of a mountain about half way back towards the reserve. We reached the foot of the mountain after dark and proceeded up the steep road to the top. On reaching the top Anna contacted the reserve with the good news. Ian Craig set the wheels in motion for the assembly of the capture team. Our trackers built a fire and made some Samburu tea, and some corn meal type of substance which we ate and then threw our sleeping bags on the ground to get some rest. We will leave for the reserve first thing in the morning.

**Jan 16** - Woke up to a beautiful sunrise far atop the mountain; what a quiet, wonderful place this is. We made tea and loaded the truck for our return. Arrived back at the reserve about ten o'clock. Anna filled Ian in on the trip and plans are to leave for the capture Friday. I'm excited as I will be participating in my first wild rhino capture. If people ever wonder if the donations to this project are well spent, believe me these people are doing a hell of a job. They truly care and are the most dedicated conservationists I've ever had the honor of knowing. The rest of the day was spent sorting our gear and making plans for the upcoming capture.

**Jan 17/18** - These last two days have been spent getting everything ready for the capture; we leave early in the morning.

**Jan 19** - Ian and Jane Craig picked me up around seven in the morning for the trip up. Bill and Anna will follow later. We arrived in the area around two o'clock. The first thing we did was set up a base camp and clear the runway for William Craig and the super cub, our small airplane. Tim, our chopper pilot, arrived as did Deiter, our vet. Colin Fracombe and his wife, Rocky, are here also. Colin runs the Laikipia rhino reserve. I was glad to see him, it had been three years. By dusk everyone had arrived, including the Kenya Rhino Capture Team with the crate. Had dinner and everybody went to sleep early as we start tomorrow as soon as it's light.

**Jan 20** - Set out this morning in groups of four to try and pick up the tracks. About eleven o'clock it rained which will wipe out last night's tracks and make it much more difficult to locate the rhino in an already difficult, dense and bushy area. I went up with Tim in the chopper to look for him, but no luck. In fact no luck today at all; will do the same tomorrow.

**Jan 22** - More rain last night, but everyone got an early start. About two o'clock fresh tracks were found. Tim and the vet plus Bill were in the chopper. Bill is videoing the capture attempt. I'm with the Kenya Capture Team with the big lorry containing the rhino crate. We are in radio contact with the chopper, the trackers are very close but haven't sighted it yet. It's getting late and at three o'clock it was called off because there would be



## Kenya Diary 1990, Continued

a lack of daylight if the rhino is darted now. But everyone is optimistic about tomorrow and let's hope the rain holds off. Tomorrow will be our last chance as the chopper must go back to Meru, so the animal must be found by two o'clock tomorrow afternoon.

**Jan 23** - No rain last night. We have an early start, must find it today. Around ten o'clock the animal was spotted. Things started to move fast. Bill went in the chopper with the vet, I was on the ground with the capture team. At eleven o'clock the animal was darted. We moved quickly with the crate through heavy bush, cutting a path with machetes as needed. Reached the downed rhino in about twenty minutes. We were told we had an eight-year-old male in excellent condition. Great news as it will be a new blood line for the females of Ngare Sergoi. The crate was lowered and moved into place, the rhino's head was maneuvered into the front of the crate with a rope attached to his head going out a hole in the back of the crate. We had about twelve men on the rope to pull and the rest of our people behind him to push. The vet gave him the reversal drug, he came up very fast and ran into the crate.

We have some great video of him charging into the crate. Bill was knocked off the back by the impact of the animal hitting the back of the crate, but did a great job of getting most of the crating on tape. The rhino was secured in the crate and loaded on the truck for the trip back to the reserve. He will be released in a holding pen at the reserve till he settles down and then let out with the others.

Being here and experiencing this operation gives me a new appreciation of what professional and dedicated people I have the privilege of working with and supporting through the Ngare Sergoi Support Group. I know the money we send to Kenya is used in the most urgent and important conservation efforts to save this great animal. I know some people in the States wonder if the money is being used wisely, I hope you believe me when I tell you it couldn't go to a more hard-working and dedicated group of people than the Ngare Sergoi Rhino Team.

Today has been a day I shall remember always. I know my decision to devote my entire efforts to help this project is paying off and I will continue to do all I can to make sure they can continue with this effort. As we are breaking camp, a near tragedy happened as William Craig took off in our small plane; the motor seized about two minutes off the ground and he was forced to make a crash landing in heavy bush. Thankfully he was alright, but the poor little super cub wasn't. We will have to leave the plane till we find a truck to come back and get it. We left two men to guard it till then. Bill and I leave tomorrow for home with the knowledge that there is hope for the future of the wildlife in Kenya.

*(Andy is available to give talks on Ngare Sergoi and the plight of the black rhino. You may contact him by writing Ngare Sergoi Support Group, Inc., P.O. Box 29503, Columbus, OH 43229 or by calling (614) 885-0458.)*





## Chapter News, Continued

### Lincoln Park Zoo AAZK Chapter

Lincoln Park Chapter, in an effort to increase AAZK awareness and membership, formed a membership committee to speak to each keeper personally. The Chapter has two meetings per month, one for officers and one for the general membership.

Last quarter's activities included a pool tournament fundraiser, "behind-the-scenes" tour of the zoo for Brookfield Zoo and Shedd Aquarium colleagues, a booth at the National Dog show where we sold T-shirts, etc. which made \$156, and provision of coffee breaks for delegates at the Dr. Scholl Nutrition Conference.

The Chapter also participated in "Bowling for Rhinos".

--*Norah Farnham, Chapter Liaison*

### Cleveland Metroparks Chapter

Current Chapter officers are:

President.....Scott Wright  
Vice Pres.....Deb Copeland  
Secretary.....Nancy Wright  
Treasurer.....Kim Miller  
Program/Entertainment  
Chairman....Jeff Polcen

The Chapter held a program at a local school and received \$66.96 (186 lbs. of aluminum cans) collected by the school. The money went to Guanacaste Natinal Park, Costa Rica through the GSFBA Chapter's Ecosystem Survival Plan program. The Cleveland Chapter also participated in "Bowling for Rhinos".

--*Nancy Wright, Secretary*

### Columbus Zoo AAZK Chapter

The Chapter is working on a sunscreen project and "Bowling for Rhinos". Also, it continues to hold keeper luncheons and to collect aluminum cans and glass for Ngare Sergoi Support Group and other conservation projects (National Audubon Society Project Puffin, Ohio Non-game Wildlife Fund, etc.). In exchange for time sorting cans

and glass, the Chapter will pay \$1.00 per hour towards a member's local and national dues.

--*Nancy Pintavalli, President*

### Greater San Francisco Bay Area Chapter

At their April meeting Chapter members heard guest speaker Ron Martorana speak on "The Role of Vitamin E Supplementation in Elephants and Indian Rhinoceros". Ron is a Veterinary Technician at the S.F. Zoo. Ron also reported on the Dr. Scholl's Nutritional Conference held in Chicago.

The Chapter sponsored a booth for Earth Day 1990 at which they sold Rainforest Crunch, described as "an all natural, addictive buttercrunch chock full of brazil and cashew nuts harvested from the Amazon rainforest." The Chapter is selling Rainforest Crunch as a fundraiser with profits going toward the purchase of habitat through the Ecosystem Survival Plan. If your Chapter might be interested in selling it for a fundraiser, contact the San Francisco Chapter for further information.

--*Chapter Flyer*

### Toledo Chapter AAZK

Due to the responsibilities of her new position as President, Suzanne Husband has resigned as Chapter Liaison. Tom Benner will now hold the position. Please direct all pertinent information to him.

The Chapter has awarded its 1990 research grant to Bruce Clark. Bruce, a senior keeper in our mammal department, will use the \$500 grant to help finance a primate study in Peru. We have also formed a committee to refine the grant's rules and procedures.

The Chapter recently participated in a local mall's charity bazaar. The Chapter was able to inform the public about the organization while raising money for the 1991 Conference.

--*Suzanne Husband/Tom Benner*

